Remarks

Claims 1 and 4-28, as amended, are pending in this application. In an Office Action dated October 6, 2003, the Examiner rejected claims 1-28 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,692,033 to Farris (hereinafter "Farris"). Applicants believe claims 1 and 4-12, as amended, are patentable and respectfully request reconsideration in light of the following arguments.

Claim 1, as amended, provides a method of queuing calls to a subscriber of queuing services accessed through a subscriber line. Call Forward on Busy Line is provisioned on the subscriber line to permit detecting a call to the subscriber line at a local switch connected to the subscriber line. If the subscriber line is busy, the call is forwarded to an intelligent peripheral within an Advanced Intelligent Network (AIN) telecommunications system. The call to the subscriber is queued in the intelligent peripheral. A determination is made that the subscriber line is not busy. If a call is queued in the intelligent peripheral and the subscriber line is determined to be not busy, the call to the subscriber is connected with the subscriber line.

The Examiner rejected all claim as unpatentable over Farris. The Examiner points to no teaching or suggestion in Farris for provisioning a Call Forward on Busy Line in a local switch connected to the subscriber line that forwards a call to an intelligent peripheral when the subscriber line is busy. Instead, the Examiner states that "the use of Call Forward on Busy Line is old and well known in the art. Obviously, when the subscriber in Farris is busy, calls may be forwarded to the IP." (Page 4.)

The Call Forward on Busy Line may be defined as follows:

> **Call Forward Busy** When your phone is busy, an incoming call is transferred to another number. That number might be one appearing on your phone system. It might be one at your home in the same city. It could even be in another city. Call Forward Busy can perform the same as Rollover Lines. I use Call Forward Busy to move calls from the first line of my residence to my second line, because my local phone company charges too

> much for Rollover lines. ... You can get Call Forward Busy from central offices, as well as PBXs and some key systems.[1]

Thus, as commonly understood and used, Call Forward on Busy Line is set by the user to forward calls to another one of her lines. Neither Farris nor the common use of Call Forward on Busy Line teach or fairly suggests using this feature to contact an intelligent peripheral for the purpose of queuing a "blocked call." Applicants therefore believe that the Examiner has failed to establish a *prima facie* case of obviousness. Claims 4-10 depend from claim 1 and are, therefore, also patentable.

Independent claims 11 and 21, though different in scope from claim 1, also provide for provisioning a subscriber line with Call Forward on Busy Line to an intelligent peripheral for call queuing if the subscriber line is busy. Thus, the Examiner has also failed to establish a *prima facie* case of obviousness with regard to claims 11 and 21. Claims 12-20 depend from claim 11 and are therefore also patentable. Claims 22-27 depend from claim 21 and are therefore also patentable.

Independent claim 28 provides a method for queuing subscriber calls. At least one subscriber call is queued in an intelligent peripheral. A busy check call is placed from the intelligent peripheral to a subscriber line. The busy check call is received in a local switch servicing the subscriber line. If the subscriber line is busy, the busy check call is forwarded back to the intelligent peripheral through Call Forward on Busy Line functionality implemented in the local switch. The busy check call is disconnected if the intelligent peripheral receives back the forwarded busy check call. A queued subscriber call is connected with the busy check call if the subscriber line is not busy.

The Examiner rejected claim 28, stating that "having the local switch call the intelligent peripheral when the subscriber line is found to be busy in response to a call to the subscriber line reads on the well known Forward on Busy feature. Calls in the queue will be directed to the called destination by either monitoring for an on-hook status as described by [Farris] (see col. 12, lines 28-38) or by repeatedly dialing the subscriber line from the intelligent peripheral; and determining that the subscriber line is busy." (Pages 4-5.)

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[1]Newton's Telecom Dictionary, 15th Edition, Miller Freeman, Inc., 1999, pg. 130.

Claim 28 provides for placing busy check calls from the intelligent peripheral to the subscriber line. The Examiner found no teaching in Farris for such operation. In addition, the Examiner makes no attempt at finding a teaching or suggestion in Farris for using a Call Forward on Busy Line, provisioned on the subscriber line, to call the IP for providing a response back to the IP to the call placed by the IP. Thus, the Examiner has failed to establish a *prima facie* case of obviousness.

Claim 8, which depends from claim 1, provides for receiving a plurality of calls to access the subscriber line. Each received call is placed in the queue associated with the subscriber line if the subscriber line is busy. Queue utilization information about each queued call is collected. Queue utilization statistics are generated based on the collected queue utilization information. Claim 26, which depends from claim 21, similarly provides for generating queue utilization statistics based on collected queue utilization information.

The Examiner rejected claims 8 and 26 by arguing that "generating queue utilization statistics based on the collected queue utilization information (this can read on the number of calls entered the queue and completing these calls based on the priority of the call and the sequence of the call in the queue, see col.4, lines 19-20, and 35-40)." (Page 5.) The cited passages are reproduced as follows:

> There is a need for an arrangement that provides a queuing service that organizes callers based on the sequence in which the callers dial the destination station.
>
> * * * *
>
> These and other needs are met by the present invention, whereby an intelligent network manages all calls to a destination number during peak calling times by placing incoming calls in a queue and initiating call-backs based on the order that the incoming calls were originally placed in the queue.

These passages appear to have nothing whatsoever to do with collecting utilization information and then generating statistics based on this information.

Claim 9, which depends from claim 1, provides for placing a call *to the subscriber* from the intelligent peripheral indicating status of the queued subscriber line call.

Claims 19 and 27 contain similar provisions. In rejecting these claims, the Examiner provided the following argument on page 5:

> Regarding claims 9, 15 [*sic*] and 27, Farris teaches the call from the intelligent peripheral indicating status of the queued subscriber line call to the subscriber (this reads on the IP 18 providing an enhanced announcement, see col. 6, lines 65-67, for example, IP 18 may announce the time, how long the call has been entered in the queue, the number of call in the queue list, ...etc.).

The passage from Farris cited by examiner is reproduced as follows:

> The local exchange carrier network may also include one or more intelligent peripherals (IPs) 18. The IP 18 provides enhanced announcement and digit collection capabilities and/or speech recognition.

This passage merely discloses that an IP is in the system, not how the IP may be used. In particular, there is no indication as to whether the "announcement" capability is for use in responding to a caller or for sending a message to the subscriber. However, Farris later makes clear that the IP is being used to respond to the caller, not the subscriber. (See, column 10, lines 41-44.) Farris neither teaches nor fairly suggests using the IP to provide status to the subscriber. Thus, the Examiner has failed to establish a *prima facie* case of obviousness.

Claim 16, which depends from claim 11, provides a system for queuing further including a plurality of intelligent peripherals, at least one service control point collecting information about each queued call and a data server aggregating queue utilization data for each subscriber. The Examiner rejected claim 16, citing Farris' ISCP (20) as fulfilling the role of Applicants' data server. In support of this construction, the Examiner offered Farris, column 6, lines 23-33, reproduced as follows:

> The ISCP 20 offers AIN routing control functionalities to customers of the local exchange carrier. For example, the ISCP includes an SCP database 22 containing customer profile records (CPRs) for controlling call processing in response to respective triggers. The ISCP 20 may also access a separate database, for example, to supplement its routing tables for certain services. In the preferred system, a second function of the ISCP is to serve as a mediation point. Specifically, the ISCP 20 mediates queries

> and responses between the local exchange carrier network components and databases operated by other carriers.

This passage discloses many uses for an ISCP. However, none of these uses teaches or fairly suggests aggregating queue utilization data for each subscriber as provided in claim 16. Thus, the Examiner has failed to establish a *prima facie* case of obviousness.

Claims 1 and 4-28 are pending in this application. Applicants believe these claims meet all substantive requirements for patentability an respectfully request that this case be passed to issuance. No fee is believed due by filing this amendment. However, any fee due may be withdrawn from Deposit Account No. 21-0456 as specified in the Application Transmittal.

The Examiner is invited to contact the undersigned to discuss any aspect of this case.

Respectfully submitted,

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